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Poetry in Landscape.

By Xanthus Smith.

In this eminently practical, scientific age of ours, when all things are being scrutinized with the most searching attention, it is becoming difficult to find persons who can sufficiently separate, or make the proper distinction, between truly artistic work and mere topographical viewing in the practice of landscape photography. Art is to a great extent imaginative and creative, and so dependent on certain poetic sentiments and acquired tastes and associations of ideas, that, unless there is a natural or inborn faculty for it, and a considerable amount of training in the proper direction, all those rare combinations and harmonies which go to make up its charms, will be overlooked, and work containing many of its best qualities cast aside as worthless, to give place to productions which, while they are perfect in all the technical excellencies of the craft, as pictures are no better than would be the work of any untutored child.

Mystery is an important element in art, partly on account of its giving some room for the play of the fancy or imagination, and partly on account of the repose given to the eye in certain passages lacking in detail, and contrasting other passages filled with minute renderings of imagery. In any landscape scene, if we view it on a clear unatmospheric day, and look in the direction that the sun is shining, so that the whole will be brilliantly and equally illuminated, we have a condition which will give the ordinary observer the most satisfactory impression of the view, because he looks at it not as a picture, but as composed of various objects, all of which he sees separately, distinctly, and satisfactorily, because equally presented to the eye, and considered for their separate qualities and practical uses. Whereas, the artist or poet, looking only for a picture, would require to have some passages partially obscured by mist or haziness, and others cast into that deep breadth of shadow which we get in looking at right angles to the sun's lighting, or in early morning or at evening, when the nearness of the sun to the horizon gives those quiet masses and elongated shadows which make such lovely passages of repose, contrasting the finished detail of the parts receiving the full blaze of light. Suppose one were describing a nice piece of meadow land, well set with good grass for pasturage, and running along one side of it, a row of thrifty trees forming good shade for cattle, and a brook at the foot for watering, it would be all very well, but no picture; but when we read Bryant's couplet,

> "And where, upon the meadow's breast,
> The shadow of the thicket lies,"

to a person of poetic fancy, there is called up at once a host of picturesque imagery of foliage, vines, briers, sloping meadow, buttercups, and rills—a scene where the painter or the poet would be at home with nature in her loveliest abandon. Here we have a mass of quiet foliage, graceful in its contours and crisply illumined by glancing sunlight, casting its deep shadows as a background to the tangle of brier, and aster or golden-rod, standing out in all the brilliance of foreground relief; and while the painter would be planning his picture

and storing his mind with imagery, or the photographer of artistic inclinations hurrying to focus his camera, the farmer, or every-day observer would be thinking only of the work to be done with axe, brier-hook, and scythe, to give a more genteel and thrifty appearance to this scene of wild neglect. A painter was wont to admire a fine mass of rock, with its weathered and lichened surface, overhung by vines, and surrounded by large and graceful ferns, which was on a neighbors place. The neighbor, learning of the interest which the painter and a few kindred spirits took in his rock, became proud of it, and in order, as he thought, to rightly bring out its beauties, and in every way show it to the best advantage, not only had all the vegetation completely cleared from about it, but had the rock itself white washed.

It is very true that the circumstance of certain combinations and effects in nature and in works of art pleasing particularly, is solely the result of training in a particular direction, the eye perceiving in them what it has been trained to perceive or look upon as excellent; and in our present rage for realistic work, we must not be carried entirely out of the world of fancy, and be forgetting what a wide difference there is between a mere view and a picture. And the best way to attain this higher training, is by careful study of the works of the most eminent painters of the past, whose pictures have sufficiently long held a high place in the estimation of persons of culture to put them above a vast deal that is constantly sought after by the untutored who are governed by the mere fashion of the time. By observing carefully, and analyzing the qualities that make these standard works excellent, and by going to nature and searching out her beauties, and applying what we have learned, may we hope to elevate ourselves to the rank of true artists in work and in feeling.

A MEMBER of the Photographer's Association of America, has had his sense of justice shocked by the acknowledgment made by one of the judges at the last St. Louis Convention—that cognizance had been taken of the manner in which the exhibits were mounted and framed, and that the decision was undoubtedly influenced thereby.

A contemporary into whose columns he pours his complaint, justifies his indignation, remarking that "such an acknowledgment shows that the juror was totally unfitted for the functions he assumed, inasmuch as he was appointed to adjudicate on the merits of photographs only, and not in connection with accessories."

A judge's lot is not a happy one, anyhow. The dissatisfied will always have us distinctly know they, of course, did not expect a medal; yet always declare their judgement superior to the decision rendered. The medals always go to the wrong persons.

A man in the private walks of life may be highly respected for his skill good judgment, and honesty of purpose; but let him be so unfortunate as to allow himself to serve as a judge, and at once, not only is his ability called in question, but even his probity is doubted.

Some one has suggested as a preventive of this inevitable dissatisfaction, to make the judges justify their decisions by a report embodying their reasons.

But judges are not of necessity more analytical or logical than other men.

How many who are possessed of good taste can give a reason why certain things please them, and yet their judgment is often sound and valuable, and we are willing to rely upon their decisions.

And so the whole thing comes to a question of individual taste, or rather an an agreement of taste of several individuals, and if, we have faith in their honesty, why not abide by their decisions.

But let us try to justify the acknowledgment that something besides the photograph *per se* influenced the judgment in the special case alluded to.

We think the acknowledgment was made in all candor. Undoubtedly, the finish of a photograph has great value in enhancing the good qualities it may inherently possess.

The manner in which it is mounted and

framed, actually gives it qualities which it did not possess unmounted and unframed.

A photograph deserving of an award must possess art qualities, but it must have something else too.

The effect of the finest artistic work is greatly weakened and may even be neutralized, by incongruous mounting.

The appropriateness of the mount is not generally taken into consideration.

Unfortunately, the percentage of photographers who understand how to gracefully pose, and properly light a subject, is not great, and it should be to their interest to study the value of accessories in setting forth to the best advantage the modicum of merit their productions may have.

When one visits an exhibition of photographic work, he is impressed with the idea that "motley is the only wear." There seems to be no disputing taste in the selection of mounts. All sorts and shades, and kinds and colors, are not only in dangerous proximity, but even mingle in the same frame, without any remorse for their violation of the first principles of harmony in color.

But we started out to justify the judge in his acknowledgment that the framing and finish of a photograph influenced his choice. Well, we have not forgotten it.

We have said that a good photograph is enriched by a proper mount, and a poor one improved thereby, and yet it is not the mount itself which really influences the judgment.

The observer is unconscious of its effect until sought for. By reason of a physiological peculiarity of the eye, we can actually change color to a considerable extent without at all meddling with it directly. All that is necessary is to alter the color which lies adjacent to it. We can satisfy ourselves of the truth of this by a very simple experiment.

If we take two little patches of red paper an inch or so in size, and place one upon a sheet of red paper, the other upon a green sheet, it will be found that the red square on the red ground does not appear nearly so brilliant or saturated in color as the one upon the green paper.

The observer who is ignorant of the facts will not believe that the two are identical in hue. These changes are due partly to the effect which contrast engenders in the eye, but partly, also, to the distraction of the judgement of the observer.

But this subject of proper mounting deserves a more generous treatment than can be afforded here.

It is touched upon merely, because we wish to justify the judge at the St. Louis Convention.

The finish had an influence on his judgment, and the confession does not compromise his fitness, but is rather *an evidence of* his critical ability. Would there were more consideration of the standards of taste on the part of exhibitors, not only in mounting their pictures, but in framing them.

The loud and disproportionate frames, and the incongruous surroundings raise the question, Why not prescribe limits to the character of the frames?

It would perhaps be impossible to have a uniformity, but we might escape the obtrusive, startling, and ugly displays, caused by the endeavor of certain exhibitors to attract attention. Let us have no more rustic work and cross-bar beams.

While talking about exhibits, we might as well object to the arbitrary scheme of classification imposed upon contributors by the photographic societies.

The multiplication of heads, no doubt, is intended to facilitate things; but it requires a photographic Hercules to properly deal with such a hydra.

May it not be well to ignore the fine distinctions, and to judge of the *merits* of photographs solely on their artistic and technical excellence.

To stimulate to good work, is the object of every exhibition; and the awards should be given for general merit and not for pre-eminence in any special class.

Very inferior work may be accorded the highest favor in a certain section, because, like the boy who was head in his class, it is the only one in it, while excellent work in a more extensively patronized department receives no notice whatever.

As long as a photograph has pictorial merit, if picturesqueness is the standard to judge by, what does it matter whether it is a portrait, a landscape, an interior or a *genre* picture.

Now this last word makes us ask the question, What is a *genre* picture? A picture of a lady sent in with no other title would be filed with the portraits, pure and simple; and a picture of a hillside and cottage, with the landscapes; but let the exhibitor merely attach a sentimental title to his contribution, and the portrait reflects the sentment, and becomes a *genre* or incident picture, and away it goes to the composition group.

Take the titles away from Rejlander's pictures, and our committees will call them portraits pure and simple.

Let the awards be for *work* pure and simple, and we think there will be a better record gained of the progress of photography, than can be had from a list of premiums for specialities.

Perhaps the London Photographic Society looks upon the subject of medals much in this light. We are told by Dr. Phipson that this body did not accord a medal to Mr. Vernon Heath, of London, because they thought it would be a kind of insult to offer an award to so distinguished a phographer.

Silver Printing on Albumenized Paper.

Read before the Photographic Society of Philadelphia by Ellershie Wallace.

I believe myself justified in making the assertion that photographic printing has not essentially changed during the last twenty years. If this be true, it might seem to be an easy matter to deduce such principles from the practice of the best operators as would lead to the the laying down of fixed rules from which no departure could be made, save at the almost certain penalty of failure in one or another of its forms.

Practical experience in photographic printing, however, as well as a knowledge of the practice of others, would rather teach us that success in this direction is hardly to be obtained by reducing or attempting to reduce the matter to scientific principles, but that empiricsm (if I may use the word) is both easier and safer. I doubt whether there is a single operation in the whole routine of silver printing that has not been fought over by the advocates of different manners of working; the result being finally left undecided.

Remembering that prints are really a secon lary product of photographic manipulation, I think that the reason of this clashing of opinion, to which I have just alluded may be found in the character of the negatives used, in the paper, and in the whole practical routine or handling. As full consideration of these three factors would be impracticable here, let me generalized my remarks, rather than attempt to give rules for working.

As far as we can gather from our knowledge of early practice in Silver Printing, it seems pretty clear that the fine effect in the print was formerly sought for by using a strongly salted paper, floated on a correspondingly strong silver bath, and used without fuming with ammonia. The negatives were also probably much more intense, or had greater contrast between light and shade. The paper itself was thicker. Inasmuch as it was an expensive matter to work silver baths of from 80–100 grains per ounce, the quantity of soluble chloride in the paper was reduced together with the strength of the silver bath. It had been definitely ascertained that over and above the quantity of nitrate of silver necessary to convert the chloride, a certain excess of silver was indispensably necessary.

As is so often to be remarked when changes take place in scientific practice at large, the pendulum swung so far in the other direction that baths of even 20–30 grains per ounce were advised, as well as the addition of other soluble nitrates which were claimed to supply, in part at least, the place of the silver salt. Such ideas are now forgotten, as they well deserve to be. The strength of the bath for ordinary work might be taken at say 50 grains per ounce, reducing to 40 in hot weather, and perhaps increasiug to 70 in

cold weather or weak light. I must again beg you to remember that I am here making no attempt at a regular formula.

The failures arising from disproportionate strength of bath to paper, would be more noticeable in the case of an unduly weak solution. The paper would print slowly, and lose much of its strength and brilliancy in toning and fixing, while the only troubles to be anticipated from too strong a bath, would be an increased tendency to discolor (particularly in warm weather), and perhaps to the formation of what are technically known as "tear-drops."

The characteristics of a perfect negative for printing would be difficult to define closely, even if we had the negatives before us, and of course still more so in words. Laying aside all technical imperfections, we can say that the perfect negative is the one that will give a complete scale of tone (or light and shade) in the print, varying from black to white.

Where prints of the finest quality are desired, it is of every importance that they be printed in a light whose actinic power will suit the negative and the paper.

The well-known rule of printing strong negatives in a strong light and weak negatives in a weak one, should always be borne in mind. I have found it better to subdue the great strength of the sun's light by pasting layers of white tissue paper over the printing frame, in the case of weak negatives, rather than to leave the frame open and print in diffused light. By following this plan, I have often obtained vigorous prints from negatives thin enough to give very effective solar enlargements on albumenized paper. Of course, this is a tedious operation; and I do not by any means advise that negatives should be made so thin as to require this treatment. But, as any landscape-photographer who has had experience with the inconstancy of dame nature and chemicals will know, the negative does not always turn out just as we might wish. I have also been led to believe that the strength of the light in which the print is made has an influence upon the tone of the print; and let me here remind you of the great law in photography, that a weak light acting for a lengthened time upon photographic tissues, gives very different results from a sirong one acting for a short time.

The strength of the silver bath, I have already spoken of, but let me refer to it again merely to say that I believe fully in the principle of using weak baths for weak negatives and strong baths for strong ones.

All that can be said about fuming can be summed up when we say that the paper should be *absolutely dry* (heat being used if required) before being subjected to the ammonia, and that the latter should always be as strong as possible. Ten minutes in strong ammonia ought to be enough.

It would perhaps be difficult to answer the question why so much stress has always been laid upon the formula by which the toning bath is made, and it is easy to see how a beginner, taking up the literature of the subject, is involved in great perplexity among the numerous recipes given. The amount of free silver left in the print after the preliminary wash, will have a direct influence upon the whole process of toning. The theory was laid down by Hardwich, that no print containing free silver could be successfully toned in alkaline chloride of gold, but it is doubtful whether this is strictly true. When we consider that nitrate of silver has not only a peculiar affinity for gelatine and albumen and is removed with difficulty from either of these organic substances, it is questionable whether prints supposed to be washed free from silver are so in reality. To get rid of the last traces, we should probably have to soak the print for a long time in a solution of some chloride or other haloid, and it would then be found that the pale brick red color so obtained would not tone up to the brilliant, vigorous black or purple. The treatment by the lime bath would seem to help us in sustaining this theory, for excellent results are to be had by simply immersing the print in the toning solution without any preliminary washing whatever. The free chlorine in the lime bath immediately acts on the free silver to a greater or less extent, after which the toning proceeds uniformly even, in

spite of the heavy deposit of chloride of silver that forms on the face of the print. To the question, "How much shall the print be washed?" I do not believe that a postive answer can be given. Presupposing good water supply, and ample room in the tanks (a most important thing), it might be said that from ten or fifteen to twenty-five minutes would be about right; the print, of course, not being allowed to stick together in masses. I have seen excellent results obtained by merely soaking the prints a few moments in water which was changed once, and followed by a wash of one ounce of No. 8 acetic acid to every gallon of water; after they had slightly reddened the acid was poured off, and the dish filled up again with plain water. The toning bath was gold with acetate of soda kept for about twenty-four hours before using.

In the ordinary alkaline toning bath, the presence of too much free silver in the prints will manifest itself by unequal action on the print, mealiness, and diagonal red lines. It is a safeguard to have a saturated solution of common salt close at hand, so that a little may be added to the bath if the washing has been insufficient. In such cases, the bath will generally be cloudy from chloride of silver after the prints have been toned. An important practical point is that there should be *white* light enough to enable the change of color to be distinctly seen. Subdued daylight is best, but gas at night may also be used. I have always judged of the tone by reflected light, *i.e.* by the face of the print; not by looking through the print, as some very successful operators are in the habit of doing. The prints must be well rinsed after toning, and of course it is necessary not to expose them to light more than is absolutely required.

I was much surprised a short time since to learn that it was a common practice not to throw away the hypo fixing bath, but to keep it over from day to day. I mention this only to condemn it; for, although fine results may be made, the tones are probably due to a sulphuretting action fatal to the permanence of the print, as well as the risk of imperfect fixation, owing to the bath becoming weaker by use, and losing its solvent properties. I would urge not only that the solution be strong, but that a liberal quantity be made up fresh for each days use, and that the prints be kept constantly moving, so as to ensure thorough action. If economy must be rigidly observed, it would be better to let the bath after use simply stand in the dish until strengthened enough by evaporation to fix negatives. Commercial hyposulphite of soda, I have never seen show an acid reaction.

The same general ideas as regards washing of prints before toning, might hold good in the washing after fixation. That is to say, I believe that too much stress has been laid upon prolonged washing. Rapid change of water, and constant moving of the prints, with every now and then draining off the water completely, ought to finish the process in from two to five hours, according to circumstances. The best safeguards against blisters, are to see that the paper is not too very dry before silvering, and to pass the prints from the hypo into a strong solution of common salt. The dish containing them may be set under the tap, and the solution slowly diluted by allowing a small stream to flow in, the washing being afterwards carried out as usual.

Let me now roughly outline a routine of printing which I have myself followed successfully. The room used for the purpose should have a southern exposure. The paper, of course, may be floated any where, and the silver bath may be 50 grains to the ounce. My favorite formula contains half an ounce of aqua ammonia to every quart of solution, the brown oxide of silver being taken up again with a few drops of strong solution of nitrate of ammonia. This leaves the bath strongly alkaline, and enough nitric acid should then be added to nearly, but not quite, neutralize it. If a few drops of saturated solution of alum and about 10 per cent. of alcohol be added, they will increase the coagulating power of the bath. The paper may be floated the night before in cool weather; and if anything occurs to prevent it from being used on the following day, it should be

laid under pressure between sheets of white blotting paper, previously soaked in a saturated solution of bicarbonate of soda and dried. The paper thus protected will keep good for many days, and, I believe, would give results superior to the ready sensitized paper now so much in vogue. Fuming should not be done until just before printing. The negatives may be sorted over, placing the strong ones and the weak ones together, and having tissue paper, cut to the proper size, ready to paste on the frames, as before alluded to. The various dodges for double printing need not detain us here; but if it be attempted, skill and care will be required. A sufficient quantity of chloride of gold solution, one grain to the drachm of water (stock solution), is measured out, allowing say one grain to the sheet. This is carefully neutralized, either with bicarbonate of soda or borax, and allowed to stand while the prints are passed through several changes of water. I have generally used the toning bath at the strength of 1 grain to 5 ounces of water, taking care to have the solution lukewarm in winter weather. The bath when ready should be nearly free from the yellow color of the gold. If the prints tone unevenly, add a pinch of common salt to every 10 ounces of bath. The fixing bath may contain an ounce of hypo to 6 of water in summer, or 4 in winter, and should be made up with *warm water*, to compensate for the refrigeration caused by the dissolving of the hypo. The prints may be left in from 10 to 15 minutes.

I would again insist upon having the dishes and washing tanks large enough to accommodate the prints with ease. The paper should be silvered in whole sheets, and very effective dishes for the purpose may be made of wood, protected by parafine, a hot iron being used to melt it and drive it well into the pores of the wood. Washing tanks might be made in the same way, but porcelain only should be used for toning and fixing. If the water be full of finely divided mud, it will be necessary to drain the prints well after removal from the wash-water, and dabble them about in a gallon or two of well-filtered water, such, in fact, as is used at table.

The Photographic Society of Philadelphia.

The annual meeting of the Society was held Wednesday evening, January 5th, 1887, with the President, Mr. Frederic Graff, in the chair.

The Secretary announced that arrangements had been made for holding the first joint Exhibition of the New York, Boston and Philadelphia Societies in New York, at Ortgie s Gallery, on Broadway near Fourteenth Street, beginning March 26th, and continuing one week.

The members were asked to bear in mind that, though not held in Philadelphia, the exhibition, so far as they were concerned, was practically the annual exhibition of the Society. Liberal contributions of pictures would naturally be expected from Philadelphia, and preparations should begin at once for sending a large collection of choice work.

Copies of the American Annual of Photography for 1887 were presented by the Scovill Manufacturing Co., Messrs. W. H. Walmsley & Co., and Wilson, Hood & Co., and votes of thanks were passed for the donations.

Resignations were received and accepted from Charles A. Brinley, W. L. Shoemaker and Edward Browning.

The Treasurer presented his annual report, showing a satisfactory financial condition.

The Chairman of the Executive Committee not being present, the reading of his report was deferred until the February meeting.

The Committee on Membership reported the election as active members of Messrs. Howard Cramp, Charles T. Thompson, Victor C. Driesbach, W. S. Roney and Louis Husson.

The Committee on Lantern Exhibition reported that arrangements had been made for holding an exhibition of lantern slides, from negatives made by members, at Association Hall on the evening of January 12th.

The election of OFFICERS AND COMMITTEES FOR 1887 resulted as follows:

President, Frederic Graff.

Vice-Presidents, John G. Bullock and Joseph H. Burroughs.

Secretary, Robert S. Redfield.

Treasurer, S. Fisher Corlies.

Executive Committee, Galloway C. Morris, Joseph H. Burroughs, and John G. Bullock.

Excursion Committee, Charles Barrington, Samuel Sartain, and Frank Bement.

Committee on Membership, Henry T. Coates, Edward W. Keene, W. A. Dripps, William L. Springs, John Bartlett, Joseph H. Burroughs, David Pepper, and Dr. H. M. Howe.

Committee on Revision of Minutes and Articles for Publication, John C. Browne, John G. Bullock, and Robert S. Redfield.

On the announcement of his re-election as President, Mr. Graff addressed the members present as follows:

"I feel at a loss how to express my thanks to the members of the society for the honor accorded me by my re-election as your presiding officer, I can only say that the compliment is in the highest degree gratifying.

It is pleasing to record a steady increase of membership to our society, with renewed interest by all in the objects of its organization. The only sad event of the year we have to record is the loss by death of our much esteemed member and ex-president Mr. Joseph W. Bates, whose valuable services in the interest of our society are fully recognized and will long be felt.

The monthly loan exhibitions made in this room by our members is a good work, which I hope will be continued; it is also hoped that the number of papers read will be increased, so that no meeting, if possible, will be allowed to pass without the production of a written communication.

The proposition made by our society of exhibiting jointly with those of New York and Boston, or rather rotating the place of exhibition triennially, has met with the co-operation of those cities; the first exhibition under the new arrangement will be made in New York, and it is hoped that our members will strive to contribute largely towards it.

We can safely predict for the lantern exhibition on the evening of January 12th, as good, if not better, success than any heretofore held.

Although no very startling discoveries have been published in the photographic world during the past year, the improvements in all branches of the work have been steady and important. The use of paper negatives and films is a new departure, and with the ingenious apparatus for their ready employment, is very attractive to the amateurs, who as a rule prefer light weight.

The success of our fellow member, Mr. Rau, with films and paper negatives, in adding to the number of his slides and pictures during his recent trip to Europe was very marked, and must have been gratifying, as well to himself as to the producers of the materials and appliances, which enables such work to be so well accomplished.

The prints which may be made upon bromide paper, by artificial light, supply a want, and is a great boon to most amateurs.

A number of new lenses have appeared during the year, the efforts of the makers being to produce such as will carry large openings, with sharpness and depth of focus, that we may be enabled to better gratify the strong desire now prevalent for accomplishing instantaneous exposures.

With the same object, the use of the so-called detective camera has been greater than ever before, and with better results, the manufacturers of dry plates have kept pace with improved lenses, and new rapid shutters, until it has become impossible to decide in what infintesimal fraction of a second, a picture may be obtained.

The use of photographic processes for book and other illustrations, is growing with very great rapidity, and so general, that even our daily newspapers produce over night in a few hours, we may almost say minutes, some sort of outline that often serves at least, to make clearer the articles written, descriptive of an accident or event.

Relief blocks, capable of being set up with letter-press, are now a necessity; for this application of photographic methods, we can turn with great pleasure to the in-

vestigations and results brought to such perfection by our fellow member Mr. Ives, and to him also is much credit due for the advance made in the practical application of orthochromatic photography, and his liberality in making these public.

In the mechanical methods of permanent printing, we can turn with pride to the beautiful work produced daily, and so rapidly, by one of our earliest members, Mr. Gutekunst, in the production of phototype pictures. The microscopic photographs produced by our fellow member Mr. Walmsley, are wonderfully perfect in their way.

In the manufacture of dry plates, our widely known member Mr. Carbutt must be mentioned as one of the first in the country to produce, commercially, the means of enjoying our art to the fullest, and who vigorously keeps pace with all advances made in that industry.

I do not wish it thought that I desire to ignore other of our members, who have done good work, but think we should all feel proud of those who have produced results so creditable to them, and of such advantage to the public at large.

The applications of our favorite pursuit are so numerous, that it would take too much time, and be of little profit, even to refer to a tithe of them, extending as they do to botany, meteorology, biology, geology, zoölogy; in fact, to the whole catalogue of "ologies."

Its adaptation to the use of astronomy will be enriched in the near future, by the use of the most stupendous camera ever conceived. Namely, one having an object glass thirty-six inches diameter, and a focus of more than fifty feet; I refer to the instrument at the Lick observatory, California, where a duplicate lens for the great telescope is about to be adapted to photographic puposes; the enormous size and perfection of the instrument, and the phenominal clearness of the atmosphere at the locality of the observatory, must produce results not heretofore reached.

The statistics of the number of dry plates produced by the many manufacturers thereof, would be very interesting, and instructive, in fact many of the works have been driven to their full capacity, and have been obliged to greatly enlarge their factories. A fair proportion of those made have been exposed by amateurs, of which our society has, I feel, done its full share, and to judge by the work which from time to time reaches this room, with most excellent results.

The number of societies in the United States, with the same objects as our own, is now reported to be over thirty, and largely composed of enthusiastic amateurs.

A school of photography has been started at Chatauqua, under the care of one of the oldest practical operators in the country, Dr. Ehrmann; this is a move in a good direction, and will lead to the improvement of those who are enjoying, or desire to enjoy the pleasures and advantages of the use of the camera.

Hoping another year will pass as successfully, as the last, and find us at its end able to record increased numbers, and continued prosperity. I heartly thank you, gentlemen, for the honor conferred this evening."

The proposal of Mr. John Sartain, that members should take part in the American Exhibition in London, action in report to which was deferred at the last meeting, was taken up, and, on motion of Mr. Browne, the Chair appointed Messrs. Samuel Sartain, Rau, and Coates, a committee to take such measures as may be necessary in regard to the sending of exhibits by members of the society.

The paper for the evening was read by Dr. Ellerslie Wallace, Jr., on "Silver Printing on Albumenized Paper."

During the discussion which followed, the Secretary stated that he had used Labarraque's solution for eliminating hypo from prints for the last two years. Pictures which had been exposed in frames during that time showing no perceptible change, and the whole washing process being completed in from half an hour to an hour.

Dr. Wallace considered the action of the chlorine on the prints to be injurious, and preferred, where it was necessary, to economize time in washing, to run the prints repeatedly through a clothes-wringer into fresh changes of water. There was

some danger of tearing the prints by this process, but the elimination of the hypo was very thorough.

Mr. Browne urged the members to experiment in silver printing on plain paper, calling attention to an article on the subject in a recent number of the "Photographic Beacon." Salted paper could now be purchased ready for sensitizing. The mat surface of the plain paper gave very artistic results, and the image seemed to be entirely permanent.

Mr. Fassett had specimens of plain paper prints made in 1856 or 1857, toned and fixed in one bath, which showed no signs of change.

Two questions in the box asked:

1st. Does a portrait lens contribute to roundness of image in portraiture?

As bearing on this subject, the Secretary read an extract from an article on "Photographic Optics," by Ernest Gundlach, in the AMERICAN ANNUAL OF PHOTOGRAPHY, which argued that a portrait or other lens used with a large opening tended to give an appearance of relief in the image, as well as of brightness, nature, and life.

2d. The cause of halation in glass negatives is generally explained as being the result of the light passing through the lens, and then through the film, striking upon the back of the glass, then being reflected at a different angle upon the reverse side of the film. Photographic books state that this can be obviated by coating the back of the negative in any opaque color. If this be so, why does not the septum, which is invariably black, and held closely to the plate, answer the same purpose? Will the members of this society please state if, in their experience with paper negatives, they have found absolutely no halation?

Mr. Samuel Sartain stated that the opaque backing must be in optical contact, to prevent reflection, and this was not the case with the septum in its relation to the plate.

Mr. Rau had found, in most cases, an absence of halation with paper negatives, but they were not entirely free from it.

Mr. Vaux thought, that where it occurred with paper-supported films, it was caused by the diffraction of the rays of light, which, with some subjects, could not be avoided.

Mr. Bartlett stated, that in making enlargements, a certain amount of halation frequently occurred, which he accounted for by the fact that the difference between the visual and chemical focus of the lens was more apparent in the production of the enlarged image.

Mr. Vaux showed a number of negatives from plates of three different makes, showing dappled markings, like irregular "honey combing," which appeared after fixing, and the cause of which had puzzled him. It was thought that, though there might be certain conditions in the emulsion rendering the plate liable to this trouble, it was probably due to not keeping the developing or fixing dishes in motion.

Mr. Fassitt related some of his photographic experiences during his recent trip in Europe, mentioning particularly his interesting visit to the Exhibition of the Photographic Society of Great Britain, his extremely courteous reception there, and the evident appreciation shown of the efforts made by some of the members to add to the interest of the exhibition by sending specimens of their work.

Adjourned.

ROBERT S. REDFIELD,
Secretary.

Distortion—Mainly by Lenses.

[A Communication to the Camera Club.]

This title, you will perceive, affords me a certain degree of latitude, and permits me to radiate out a little should I so desire it.

Can Photography Lie? was the title of a paper recently read at one of our Metropolitan Societies, and from the discussion that followed, it was made abundantly plain, that whether photography can lie or not, there was no room for doubting that *photographers*, as such, could and did.

I do not think it necessary here, then, to do more than barely allude to what, by elasticity of diction, may be termed the ethics of photography. Our art science, so potent for recording truth, may, in the

hands of some, be made the instrument for perpetuating falsehood, and thus employed is the plastic tool of the unscrupulous. But this belongs to the department of moral photographic distortion, whereas I desire to confine myself here to physical ethics, in particular the influence of the lens in causing distortion. Perhaps it may be better at this stage to make an attempt to define distortion. Broadly speaking, it is inaccuracy in rendering, on a flat surface, a drawing or projection of any scene; but this being somewhat broad, I narrow it down for my special purpose, by saying it is the inability of a *lens* to project with truthfulness any scene in front of it; and if a photographic drawing does not satisfy the conditions imposed by the recognized principles of perspective, it is said to be distorted. Such distortion has its visible development in curving all straight lines, which do not pass through the centre of the picture, and in exaggerating the dimensions of certain objects in the picture, in respect to others, in a way which is opposed to the principles of true perspective. This kind of distortion is a concomitant of the employment of single lenses, whether achromatized or not.

If the camera fitted with such a lens is directed to a row of pillars, squares, or any other class of objects identical in dimensions, those projected at or near to the centre of the ground-glass will be on a larger scale horizontally than those at the margin, more especially if a wide angle of the view be included. The difference between those near the centre of the plate will be so slight as to be inappreciable; hence, if only a narrow angle be included when employing such a lens, there is no practical distortion apparent. The distortion is there, but it is so small in amount as not to arrest the attention. In a landscape it is not perceived at all, even though a wide angle of subject be embraced in the picture.

It is in architecture or the coping of a plan or map, where it becomes apparent. No matter how perfect a landscape lens may be, how superb its definition, or penetrative its range, though it may produce the finest line of the finest engraving with all the crispness of the original, and delineate the very structure of the stones of which an edifice is formed, yet will it not be either a copying or an architectural lens.

The cause of this next demands consideration. In every lens there is a point known as its optical centre, the situation of which is determined by its form. Incidently I remark that it is from this point that the focus has to be measured, although this is outside of the subject for immediate consideration. In some lenses it is in the body of the glass, in others on the surface, and in still others outside of the lens altogether. It is a property of this point that every ray which passes through it emerges from the lens in a direction parallel to that at which it entered. Now it so happens that this is one of the conditions for giving freedom from distortion; all the the rays must emerge from a lens, or combination of lenses, in a direction parallel to that at which they enter. That is the law which governs freedom from distortion.

I here illustrate how impossible it is for the landscape lenses in common use to conform to the requirements of this law. [The speaker here drew certain diagrams on the blackboard.]

Before we pass on to the cure of distortion, let me observe that the more closely the rays are made to pass to the optical centre, the less will be the distortion produced by the lens. The best condition for flatness of field, and a well defined margin, is when the diaphragm is at such a distance from the lens that the extreme margin of the picture is formed by the extreme margin of the lens. But this, unfortunately, is conducive to distortion in its greatest possible development. As you move the diaphragm closer up to the lens, so does the distortion decrease until, by absolute proximity to the lens, the distortion is reduced to the minimum. But as the marginal definition suffers by such approximation of the stop to the lens, it is necessary that the aperture in the stop be seriously reduced when employed under such circumstances.

I like single lenses; and in saying that there is a vigor and "go" about their pro-

ductions, I only quote the opinions of two eminent London opticians, now deceased. No flare spots or fog about them, unless the diaphragm has been wrongly placed, almost intentionally so, and even then the lens may not respond.

Before leaving this part of my subject, I observe that even with a single or distorting lens, it is not only possible, but easy, to obtain rectilinear or orthographic photographs. Select two simple lenses, such as strong spectacle glasses, one a meniscus or periscopic, and the other a concave, selected of such strength that one neutral izes the other, thus forming a combination equal nearly to a piece of plain glass, and place these just in front of the diaphragm. The lens thus becomes rectilinear. Those of you who prefer the single landscape lens, and may at some time or other be confronted with an architectural subject which fills the plate, and is thus projected under distorting conditions, may become quite independent of adverse fate, by invoking the aid of this corrector, which may be carried in the pocket, ready for use when required.

When the position of a landscape lens is reversed, the stop being now next the ground-glass, then do we obtain distortion of the pincushion class. The row of pillars or cubes in this case has its central one smallest, the dimensions of the image increasing as we approach the margin of the plate. This is the nature of the distortion that was given by the so-called orthoscopic lens; and at a time (1861) when the subject of distorting-lenses was *in excelsis*, and I and others made a fad of it, I discovered that by placing a thick plate of glass in front of the sensitive plate, the distortion could be eliminated. This applies also to the employment of the meniscus lenses of the present time, when reversed in position. [I illustrate on the blackboard the influence of this plate upon the rays.]

Double lenses. In all double lenses, the stop of which is placed in the due ratio of their focal power, the conditions of freedom from distortion are obtained.

I here show the evolution of our most modern symmetrical and rectilinear lenses from the original monad. [Demonstration given.]

Is it not possible to construct a single lens, which in itself shall project a picture free from distortion? Never, so long as we adhere to the present form. But by departing from such form, and adapting something akin to that of the Coddington pocket-glass, known to you all, it may, I think, be effected. This is a single lens, possessing great thickness, the external surfaces, or ends of the glass cylinder, being ground to spherical curves. It has a contraction in the middle, through which all rays must be transmitted. Its errors of spherical aberration are minimised by its thickness, but its chromatic correction is not attempted. To adopt this system to photographic use, first of all a definite angular aperture, such as f-16, must be fixed upon; for the optical centre being *in* the body of the lens, no stops are admissible. [Demonstration.]

Either of the five forms of achromatized Coddingtons here drawn, or something like them, may supply the condition of a single achromatic lens, giving flatness of field, brilliance of illumination, sharpness, and freedom from distortion. The central or axial pencils we care nothing for: they take care of themselves; witness the telescopic object glass. It is the oblique rays that cause trouble to opticians.

Although not strictly within the scope of my subject, as I had intended it, I may here refer to the distortion which arises from imperfect using of a lens and camera.

The distortion of convergence or divergence is caused by the map, plan, picture, or building not being on the same vertical plane as the ground-glass of the camera. This occurs altogether irrespective of the nature of the lens employed, and would arise even were there no lens at all in the camera, a pinhole taking its place. When one points a rigid camera (that is one without a swing back) upwards at a building, so as to get it all in the picture, the sides of such building must converge like the limbs of a capital A; and, conversely, if directed downwards, the vericals will diverge like letter V. This is certainly distortion, but the lens must not be blamed for it.

Nor must blame be attributed to the lens by which a violent perspective is obtained. In architecture, the lines are offensively violent by a too near point of sight. In landscapes, it causes ponds in the foreground to become lakes, rivulets to become rivers, and distant mountains to become molehills, or, rather, to lose their identity and character by becoming merged into the distant landscape. This is caused by the employment of a lens of too short a focus, and embracing too great an angle on the plate. In portraits, this kind of distortion is apparent in the enlargement of the hands, knees, and feet. It is caused by selecting a point of sight too near the sitter, and is remedied by removing the camera to such a distance from the sitter, as to reduce all the parts practically to the same uniform scale of representation. In these cases the perspective is not false—it is only violent and in bad taste, and it conveys an erroneous idea. All the same, it is distortion, although an angular measurement, made from the point of sight, would demonstrate linear accuracy.

What *is* truth? It is not necessarily realism. But I must steer clear of the metaphysics of distortion, although the subject is tempting.

I do not conceive that my subject necessitates my speaking of the distortion that arises from the expansion of the printing paper more in one direction than another while wet. While distortion certainly results from this, the lens has neither part nor lot in causing it.

But, it may be said, is not the unequal lighting of the plate a species of distortion? Scarcely so. From the very nature of the diaphragm, or of a lens working at full aperture, the axial illumination is more intense than is an oblique ray, which is both less in volume and has farther to travel. With a view to obviate this axial intensity, and at the same time reduce the power of the bright light from the sky in favor of the duller illumination of the foreground, I recommend the adoption of the following system. Place in front of the diaphragm, and *at some little distance from it*, a small vertical strip of blackened metal of a V shape. If in front of the diaphragm, it must be placed with the base uppermost, the opposite condition ruling when it is otherwise placed. The two-fold effect is produced that the volume of light which reaches the sides or ends of the plate is not only equal to that by which the centre is impressed, but may be rendered greatly in excess of it; and, also, that the light from the sky may be so greatly cut down as, if desired, it shall be even subordinate to that coming from the foreground.

This is a much better system than another which I have often recommended for equalizing the sky and foreground, namely, by placing the stop in a downward sloping position.

J. TRAILL TAYLOR.

[The paper was illustrated throughout by diagrams drawn on the blackboard.]

Development with Hyposulphite in Emulsion Photography.

BY M. DE VILLECHOLLE, (Paris).

[Translated by Ellerslie Wallace.]

The gelatino-bromide process, although bringing about extreme simplicity in photographic operations, particularly in exposure where a degree of rapidity long unhoped for was attained, has nevertheless been found wanting in certain particulars. People are on the lookout for emulsions more and more rapid, and the plate-makers feel themselves compelled to produce plates of such extreme sensitiveness that they frequently become a nuisance even to expert operators, as well as a constant cause of failure to the beginner.

It may be said that, at the present time, there is a demand for (1) rapid plates for portraiture; for (2) extra-rapid plates for instantaneous effects; for (3) comparatively slow landscape plates and still-life, without counting emulsions on opal glass for the window, and those made to rival albumen in fineness and delicacy, as required in lantern slides for projection, etc. Such a multiplicity of formulæ may well introduce confusion into plate manufacture, where great experience and constant care are demanded. Photographers, more-

over, will require a good deal of apparatus, and run the risk of disastrous confusion, when working with so many different plates, particularly in the development.

After thinking over the subject, it has seemed to us that we might easily do away with all these troubles by availing ourselves of the various methods of development, and by a skilful application of the stimuli and the restrainers of development.

Our advice would be, that a single formula for emulsion of good rapidity be chosen, such as is turned out by the best makers, and that the formula then be adhered to, no matter how slight or how great the rapidity desired.

The experiments made by myself, and repeated by numerous operators, all vouch for the excellence of the means already at our disposal, but which are not well known, owing to the multiplicity of formulæ. I have thus seriously considered how certainty might be obtained, and, aided by perfectly methodical manipulation, do away with all hesitation.

Let us say, for instance, that portraits, landscapes, or instantaneous effects are to be made with a given brand of plates; if alkaline development be used, all will go well, if a judicious combination of the alkalies, the pyro, the sulphites, and the bromides, be made. This developer requires skill, tact, and patience, which, by no means, every operator can boast of possessing. Consequently, ferrous-oxalate is often resorted to, in the hope of getting better results.

Citric acid and the bromides are often used as restrainers for over-exposure. They are well known, and easily applied. But much has been said in favor of hypo-sulphite of soda as an accelerator—particularly in instantaneous work—but it is dangerous from its tendency to form a veil or fog of varying opacity. I prefer to add a little sulphite of potassa.

Recourse has also been had to mysterious liquids, more or less efficacious. I have abandoned all these empirical methods, and availed myself of both the researches of my friend M. Audra, as well as of the recent and curious experiments of M. Ferrier, which have been carried out with his well-known skill.

M. Audra has especially proved the efficacy of a solution of 1 gramme (15 grains) of hypo, and 10 grammes (154 grains) of bromide of ammonium, in 35 ounces of water. After exposure, the plates are dipped in this mixed solution, washed in running water, and immediately developed with ferrous-oxalate.

M. Ferrier used a bath of 2 per 1000 of hypo, without bromide, immersing the plates from 15–20 seconds before exposure; they are then washed and dried spontaneously. Both of these plans are excellent. There is a great increase in sensitiveness, without any trace of fog, and the exposure is no longer than that required for alkaline development.

However, on comparing two plates made by myself, exposed under similar conditions, the one treated with hypo fifteen days before exposure, the other being treated at the moment of development, and both remaining in the developer for the same length of time, I found that the one treated by M. Audra's method had more detail and softness, whence we draw the conclusion that these plates were the more sensitive.

Nevertheless, I repeat that both processes are very good, and may be looked to as capable of rendering great service in ferrous-oxalate development.—*Bulletin de la Societe Francaise de Photographic.*

OUR ILLUSTRATION.—In photography, color, which adds so much to the beauty of a landscape, is only a hindrance to the perception of the harmonies of light and shade. It is necessary that there be an instinctive or acquired ability to translate the multitude of hues into monochrome to gain an idea of the artistic effect of the massing of light and shade. It is not always possible for the photographer to have command of the most suitable point of view or to adapt the surroundings exactly to his conception of a beautiful picture, but the lack of the knowledge of chiaroscuro, will cause him to convert even a naturally perfect view into a mass of confusion and ugliness—

"By making worse what nature made so clear."

We are glad we can give our readers so artistic a study of landscape, with such beautiful contrasts of light and shade, and harmonies of lines and masses as in the copy of the painting by Mr. Xanthus Smith. The suggestion for this lovely picture, which reflects so perfectly the lines of Bryant, was derived from an ordinary photograph, in which the elements of the beautiful lay concealed, until called forth by the artistic perception of the painter.

The picture, so full of repose and poetic sentiment, needs not our comment, and we, with pleasure, refer our readers to the excellent paper on "Poetry and Landscape," which Mr. Smith has kindly given us as a counterpart to his lovely landscape.

The negatives are upon Woodbury Plates, and the prints upon Morgan's celebrated Albumen Paper.

BOOK NOTICES.

"Isochromatic Photography with Chlorophyl," by Frederic E. Ives. Special Edition, containing photograph of the solar spectrum, and all the latest contributions of the author to this important subject.

Whatever credit others may deserve for securing the proper translation of the colors into relative monochrome, it is now generally acknowledged that Mr. Ives' process has the right of priority for completeness. All honor to those earnest investigators who have worked, and are still working towards the solution of this problem, yet we feel proud that Mr. Ives should so early have discovered a method which has not been surpassed, if it has been equalled, even by the most recent labors in this new departure of photography.

"The American Annual of Photography" and "Photographic Times Almanac," for 1887. Published by Scovill Manufacturing Co., New York.

In the making of photographic books, truly, there is no end, and it must be confessed that their authors are frequently obliged to urge with eager compounds, our cloyed palates for their productions. So, that one generally takes up a new photographic publication with a certain amount of consideration, if not forbearance: but when upon opening a book at random, we continue to read with interest, and even take it home with us, when the time comes to close our office, it may be safely said, that book is a good one. Scovill's New Annual we find just such a book.

Photography is a growing art. It has not yet crystalized, and many earnest workers are laboring at the problems, which still require solution. Consequently there must be an accumulation of facts, many of value, but some also, of little worth; and the end, and purpose of the photographic Annuals should be to winnow the chaff, and to gather the wheat into its garners. Their value is in proportion to the faithfulness with which the harvesting is done.

The editor of the "American Annual of Photography" is possessed of good selective judgment, and the numerous papers he has collected are of real value, coming as they do, from the pens of well-known practical writers. Another characteristic we like about the Annual, is its comprehensiveness, and the broadness with which the different phases of the science or art are treated.

"Photography in the Studio and Field" is the title of a new work by Mr. E. M. Estabrook.

The constantly increasing army of amateurs has created a demand for such a book, and we are glad that so capable an author has undertaken the task. We remember his excellent treatise on Ferrotypes, published some years ago, and on receipt of the present work, anticipated as successful a result.

It is not a scientific work, but a clear and comprehensive treatise of the various photographic operations. The style is good and instructive, and is easily understood, even by a beginner; and, although it contains a good deal of matter which, of necessity, requires concise writing, everything is made clear, even in the treatment of the more difficult processes of the

science. Published by E. & H. T. Anthony & Co., New York.

From the same publishers, we have received No. 21 of their Photographic Series, "On the Choice and Use of Photographic Lenses," by J. H. Dallmeyer. Sixth edition.

It is truly an enjoyment to read a book by an author so thoroughly conversant with his topic as the one before us. The subject of lenses is difficult, yet one of the most important in photography, and, therefore, demands a conscientious treatment.

A superficial knowledge may serve a writer of tact to gloss over difficult parts of some of the branches of photography, so as to deceive the beginner as to his ability; but when a subject like the present, involving so intimate an acquaintance with all its details is taken in hand, half-knowledge will not avail to hide ignorance.

The little book before us is emphatically one of the best practical treatises on lenses we are acquainted with, and we shall keep it handy for frequent reference. Our opinion is shared by many others, as we see from the title page the present issue is the sixth thousand.

Also by the kindness of E. & H. T. Anthony & Co., a neatly bound copy of the "Photographic Bulletin," for 1886.

The excellent reading matter, good type, and the beautiful illustrations, especially those by the Indotinte process, combine to make the volume a valuable addition to our photographic library.

THE Photographic Stock Business and Publication of the AMERICAN JOURNAL OF PHOTOGRAPHY, hitherto conducted by Mr. Thomas H. McCollin, at No. 635 Arch St., Philadelphia, will hereafter be continued in connection with Mr. Alfred E. Maris, under title of Thomas H. McCollin & Co.

Mr. Maris is a gentleman of excellent business reputation, and possessed of those qualities which shall insure an increase of the pleasant relations which have always characterized business intercourse with the house.

THE SOCIETY OF AMATEUR PHOTOGRAPHERS OF NEW YORK.—A most interesting meeting of this society was held on December 14, 1886, with President Beach in the chair, and Mr. J. W. Champney acting as secretary *pro tem.* Letters were read relative to business connected with the Society, also the reports of the Committees on the Society's Portrait Album and International Lantern Slide Exchange. The Committee on Joint Exhibition likewise reported that the right of refusal for a few days of Ortgie's Gallery, on Broadway, near Fourteenth St., had been secured for the week of March 26th to April 2d, 1887. A final decision, depending upon the approval of the Board, will be reached this week. The librarian reported the receipt of a window transparency, on the new ground-glass plate, from John Carbutt; two large photographs of the interior and exterior of St. Agatha's Church, Philadelphia, from James Monaghan; and a book, entitled "Treatise on Paper," by Richard Parkinson.

Several new members were elected, and a few resignations received.

Dr. Roosevelt then read his excellent essay on "Anatomical Micro-Photography," explaining the ordinary process of staining tissues, and the difficulties attending the photography of such specimens, by reason of the inability of ordinary plates to render the proper color-tone relations. He explained a very ingenious method of overcoming the difficulty by using a contrast color to secure a monochromatic light, employing to this end a glass cell, which may be filled with any color desired to complement the one being photographed.

During the remarks, Dr. Roosevelt showed the practical operation of the apparatus, and the fine effects produced were much appreciated by the spectators.

The President introduced Prof. Spencer B. Newbury, of Cornell University, who read a paper on "Unboiled Emulsions," which gave rise to a discussion, and several important points connected with emulsions were touched upon.

The discussion on the defects in dry plates inclined to lay the blame of pinholes, etc., at the door of the makers.

Annual Exhibition of Lantern Slides by the Photographic Society of Philadelphia.

A large assembly gathered in the lecture room of Association Hall, on the evening of Wednesday January 12, to enjoy the display of work of the members of the Society.

The pictures were admirable projected upon a large screen, by Mr. Frank Bement, assisted by Mr. W. H. Rau, while the titles were read by Mr. Galloway C. Morris. One hundred and sixty-five slides were shown, contributed by 49 members, forming a varied collection of landscape portrait, and composition subjects.

In technical excellence, that is, good chemical qualities and general photographic properties, the display was probably one of the best the society has ever made. There was scarcely a slide that did not show evidence of skill and care in the manipulation of the negative; but, in point of artistic merit, the exhibition was not up to the standard, which characterizes the work of the Philadelphia Society; although there were some few examples worthy of the highest commendation for the fine art qualities they displayed.

January Bargain List.

Accessories:

1—Papier Mache, Fire Place and Cabinet combined, fair condition, . . 8 00
1—Papier Mache Pedestals and Bases, good order, each 3 50
1—Papier Mache Wainscoting, fair order, 3 50
1—Universal Position Chair, Crimson Terry; all Attachments except Baby Chair; good as new 30 00
—Spencer Head-rest 11 00
1—Drapery 4 00
1—Drapery 6 00
1—Centennial Camera Stand, in good condition 11 00
2—Tall Head Rests, price each 2 00
1—Papier Mache Log, 2 feet long . . . 2 00
1—8x10 Osborne Interior, "new," light left of subject 16 00
1—20 inch Eureka Burnisher, good as new 20 00
1—Pharaoh Position Chair 20 00
1—Seavey Rock, new 4 50
1—14 inch Eureka Burnisher, Entrekin 20 00

Camera Boxes.

1—5x8 Tourist Outfit, including 5x8 Tourist Camera Box, 2 Daisy Plate Holders, 1 Extension Tripod, and 1 Canvas Carrying Case, very little used. Price, new, $40.50, will sell for 30 00
1—4x7½ Stereo Box (wet plate) and Plate Holder, fitted with a matched pair Zantmeyer Lenses 30 00
1—6½x8½ Portrait Box and Plate Holder, fair condition 6 00
1—5x8 A O Co. first quality box, 4 double holders, carrying case tripod.
1 5x6 Dallmyer R R Lense, used very little, good as new 68 00
1—14x17 A. O. C. Camera, Double Swing, with Zentmayer Combination Lens 75 00
1—½ size Am. Op. Co. D. S. B. Portrait Camera, fitted with ½ size Ross Lense 45 00
1—5x8 Am. Op. Co. Camera 6 50

Lenses.

1—4x4 Darlot Portrait Lens, with Rack and Pinion Movement and Central Stops. Very little used. 25 00
1—5x8 Waterbury Lens 2 50
1—13x16 Harrison Globe Lens W. . . . 20 00
1—1-4 Size Darlot Gem Lens 3 00
1—11x14 C. C. Harrison, Central Stops. 35 00
1—Seavey baby shell, with background. 5 00
1—Matched Pair Ross Symetrical Stereo Lens, 4½ in. focus. By using back combination only will cover 5 x 8 plate full; will be sold singly or in pair. Price each, $25, per pair . . 45 00
1—Finder 2 25
1—Prohs Shutter No. 2, Pneumatic release 10 00
1—Matched pair German Stereoscopic Lenses, in good order. 15 00
1—Matched Pair imitation Dallmeyer Lenses, per pair. 12 00

PATENT FOR SALE. THE ADAMSON CO., Patent Solicitors, Muncie, Ind.

WANTED—Position in a first-class Gallery as retoucher or printer; best reference. Address L. Wendenburg, College Hill, Easton, Pa.

FOR SALE—Portable House, 14x24. Price fitted, $250; unfitted, $150. Address Thos. H. McCollin & Co., 635 Arch St., Phila.

WANTED—A Portable House or Photo. Car. Apply Thos. H. McCollin & Co., 635 Arch Street, Philadelphia.

Superior Mammoth Voitlander Tube, the property of a retired photographer, will be sold low. Apply at the Husted Studio, Ridge Ave. and Wallace St.

THE

WOODBURY

DRY PLATE

Is Easy of Development, attaining any Required Degree of Intensity without the Slightest Tendency to Fog; gives Vigorous, Brilliant Negatives, and Soft High Lights, Clear Shadows, and a Wealth of Gradations Unequaled by any other Plate.

Read the following letter from Mr. Xanthus Smith, the eminent marine painter:

MR. THOS. H. McCOLLIN,

DEAR SIR:—Learning that it was the intention of the WOODBURY DRY PLATE CO. to manufacture a plate that would be of an excellent quality, and above all of a uniform standard of excellence, immediately on their coming upon the market I purchased and used them. The work which I did upon them was of so remarkable a character, that I feel it due to the maker that I should say a few words in approbation of his skill The plates are heavily coated and appear to be rich in silver, and it is a perfect delight to develop them. I do not use the formula for development given with them, but my own. I prefer pyro and ammonia as a developer for dry plates. Now the beauty of these Woodbury plates is, that they come up slowly and may be allowed to remain it seems almost an indefinite time in the developer without the slightest tendency to fog or dim in the deepest shadows, and during this time the image is growing wonderfully in refinement of tones. When you can get a negative that is sufficiently intense in a few points of high light to leave the white paper and absolutely clean in the touches of deepest shadow so as to print a clear black with every possible gradation of tone between, then you have about perfection, and I attribute it to this cleanness and slowness of developement that these plates realize, in a wonderful degree the texture of objects.

All specks from dust, spots and stains in negatives by giving a surface upon the finished print destroy the appearance of relief—to exemplify what I mean, all who enjoy looking at stereoscopic pictures, know how the effect is marred by a spot or blemish on one of the prints—and the impression on the eye is much, the same though in a less degree with ordinary prints. Should the Woodbury plate maintain its excellence, which there is every reason to hope it will, those practicing photography, will enjoy that happiness which success only can give.

XANTHUS SMITH.

Manufactured by WILLIAM GRISCOM, Jr.

THOS. H. McCOLLIN & CO.,

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635 ARCH STREET, PHILADELPHIA.